



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/657,947

09/09/2003

Ray Y. Lai

5681-66302

3026

58467

7590

03/30/2009

MHKKG/SUN

P.O. BOX 398

AUSTIN, TX 78767

EXAMINER

GILLIS, BRIAN J

ART UNIT

PAPER NUMBER

2441

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/657,947	Applicant(s) LAI, RAY Y.	
	Examiner Brian J. Gillis	Art Unit 2441	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06012006 and 07032007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claimed computer-accessible medium in claims 53-74 lacks antecedent basis.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the one ore more tiers" in line 18. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the one or more layers" in lines 18-19. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the one or more tiers" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "the one or more layers" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 31 recites the limitation "the one or more tiers" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 31 recites the limitation "the one or more layers" in line 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 53 recites the limitation "the one or more tiers" in line 26. There is insufficient antecedent basis for this limitation in the claim.

Claim 53 recites the limitation "the one or more layers" in lines 26-27. There is insufficient antecedent basis for this limitation in the claim.

As for claims 2-25, 32-52, and 54-74 which claim dependency from claims 1, 31, and 53 respectively, these claims are rejected under 112 second paragraph per the rationale of claims 1, 31, and 53.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 26-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed system is software per se. Please refer to MPEP 2106.

Claim(s) 31-52 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to particular machine, or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of In Re Bilski 88 USPQ2d 1385. The instant claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a

Art Unit: 2441

statutory process. The claimed method is broad enough that the claim could be completely performed mentally, verbally or without a machine nor is any transformation apparent.

Claims 53-74 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite computer-accessible medium which lack antecedent basis in the specification but for examination purposes is interpreted to be a carrier medium as disclosed on page 245 of the specification which includes non statutory subject matter such as but not limited to signals or transmission media. The computer accessible medium must be in an embodiment which are structurally and functionally interconnected with the software in such a manner to, in and of itself, enable any usefulness to be realized. Please refer to MPEP 2106.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 23, 26-28, 31-35, 50, 53-57, and 72 are rejected under 35 U.S.C. 102(e) as being anticipated by Carey et al (US PG PUB US2004/0225660).

(Claim 1 discloses) a system for generating a vendor-independent Web Service architecture, comprising: a processor (Carey et al shows a processor is utilized

Art Unit: 2441

(paragraph 26).); and a memory comprising program instructions, wherein the program instructions are executable by the processor to: identify one or more logical components of the Web Service architecture according to one or more use case requirements for a Web Service (Carey et al shows a request which identifies the web services based on a business requirement is received (paragraph 31).); translate the one or more use case requirements and one or more technical constraints to determine a plurality of heterogeneous Web Service components (Carey et al shows each requirement has an associated technical restraint which used in the process to identify a component to use (paragraphs 29, and 32-34).); categorize the Web Service components according to a Web Service architecture framework (Carey et al shows the components are categorized by the provided framework (figure 3 and paragraph 34).); organize the Web Service components according to two or more tiers and two or more layers of the Web Service architecture (Carey et al shows functions or components are organized by level of need and how to provide if not available (figures 4 and 5 and paragraph 36).); modify one or more software components according to one or more architecture principles for each of the one or more tiers and the one or more layers (Carey et al shows the components are modified if a required service is not available (paragraphs 37-40).); and apply one or more Web Services design patterns to the Web Service architecture where appropriate (Carey et al shows once functions are complete they are adapted to the application (paragraphs 37-40)).

(Claim 2 discloses) the system as recited in claim 1, wherein the Web Service architecture is configured for use in implementing a Web Service (Carey et al shows the

Art Unit: 2441

system is used to provide web services (paragraph 23)).

(Claim 3 discloses) the system as recited in claim 2, wherein the Web Service comprises: a service provider configured to provide one or more services of the Web Service; and one or more service requesters configured to access the one or more services from the service provider via a network (Carey et al shows the system has one or more providers providing web services and one or more requesters requesting services (paragraph 24)).

(Claim 4 discloses) the system as recited in claim 3, wherein the Web Service further comprises a service broker configured to interact with the service provider and service requester to negotiate and provide the services of the service provider to the service requester (Carey et al shows the registry is a broker that performs a search until a match is found (paragraph 34)).

(Claim 5 discloses) the system as recited in claim 3, wherein the Web Service further comprises a service registry, wherein the service provider is further configured to register and publish the services in the service registry, and wherein the service requester is further configured to discover the service provider through the service registry (Carey et al shows a UDDI registry is used (paragraph 31)).

(Claim 6 discloses) the system as recited in claim 2, wherein the Web Service is a Business-to-Consumer Web Service, wherein the service provider is a business service provider, and wherein the service requester is an end user (Carey et al shows the service provider is a business provider and the requester is a client computer (paragraphs 24 and 25)).

(Claim 7 discloses) the system as recited in claim 2, wherein the Web Service is a Business-to-Business Web Service, wherein the service provider is a business service provider, and wherein the service requester is a server (Carey et al shows the service provider is a business and the requester is a server (paragraphs 24, 25, and 31)).

(Claim 23 discloses) the system as recited in claim 1, wherein the program instructions are further executable by the processor to provide integration and interoperability with the Web Service architecture for existing business functionality including one or more mainframe systems (Carey et al shows mainframes may integrate since a mainframe may be a provider and a requester (paragraph 25)).

(Claim 26 discloses) a system for designing and implementing Web Services comprising a plurality of heterogeneous components, comprising: means for applying a Web Services structured methodology and one or more design patterns to a Web Service architecture (Carey et al shows a methodology and design patterns are used (figures 3-5 and paragraphs 29-34, and 36-40).); and means for implementing a Web Service according to the Web Service architecture (Carey et al shows the system is used to provide web services (paragraph 23)).

(Claim 27 discloses) the system as recited in claim 26, wherein said Web Services structured methodology comprises: means for identifying one or more logical components of the Web Service architecture according to one or more use case requirements for a Web Service (Carey et al shows a request which identifies the web services based on a business requirement is received (paragraph 31).); means for translating the one or more use case requirements and one or more technical

Art Unit: 2441

constraints to determine a plurality of heterogeneous Web Service components (Carey et al shows each requirement has an associated technical restraint which used in the process to identify a component to use (paragraphs 29, and 32-34).); means for categorizing the Web Service components according to a Web Service architecture framework (Carey et al shows the components are categorized by the provided framework (figure 3 and paragraph 34).); means for organizing the Web Service components according to two or more tiers and two or more layers of the Web Service architecture (Carey et al shows functions or components are organized by level of need and how to provide if not available (figures 4 and 5 and paragraph 36).); means for modifying one or more software components according to one or more architecture principles for each of the one or more tiers and the one or more layers (Carey et al shows the components are modified if a required service is not available (paragraphs 37-40).); and means for applying one or more Web Services design patterns to the Web Service architecture where appropriate (Carey et al shows once functions are complete they are adapted to the application (paragraphs 37-40)).

(Claim 28 discloses) the system as recited in claim 26, wherein said Web Services structured methodology comprises means for providing integration and interoperability with the Web Service architecture for existing business functionality including one or more mainframe systems (Carey et al shows mainframes may integrate since a mainframe may be a provider and a requester (paragraph 25)).

(Claim 31 discloses) a method for designing and implementing a vendor-independent Web Service architecture, comprising: identifying one or more logical

Art Unit: 2441

components of the Web Service architecture according to one or more use case requirements for a Web Service (Carey et al shows a request which identifies the web services based on a business requirement is received (paragraph 31).); translating the one or more use case requirements and one or more technical constraints to determine a plurality of heterogeneous Web Service components (Carey et al shows each requirement has an associated technical restraint which used in the process to identify a component to use (paragraphs 29, and 32-34).); categorizing the Web Service components according to a Web Service architecture framework (Carey et al shows the components are categorized by the provided framework (figure 3 and paragraph 34).); organizing the Web Service components according to two or more tiers and two or more layers of the Web Service architecture (Carey et al shows functions or components are organized by level of need and how to provide if not available (figures 4 and 5 and paragraph 36).); modifying one or more software components according to one or more architecture principles for each of the one or more tiers and the one or more layers (Carey et al shows the components are modified if a required service is not available (paragraphs 37-40).); and applying one or more Web Services design patterns to the Web Service architecture where appropriate (Carey et al shows once functions are complete they are adapted to the application (paragraphs 37-40)).

(Claim 32 discloses) the method as recited in claim 31, further comprising implementing a Web Service according to the Web Service architecture (Carey et al shows the system is used to provide web services (paragraph 23)).

Art Unit: 2441

(Claim 33 discloses) the method as recited in claim 32, wherein the Web Service comprises a service provider and a service requester, the method further comprising: the service provider providing one or more services of the Web Service on a network; and the service requester accessing the one or more services of the Web Service on the service provider via the network (Carey et al shows the system has one or more providers providing web services and one or more requesters requesting services (paragraph 24)).

(Claim 34 discloses) the method as recited in claim 33, wherein the Web Service is a Business-to-Consumer Web Service, wherein the service provider is a business service provider, and wherein the service requester is an end user (Carey et al shows the service provider is a business provider and the requester is a client computer (paragraphs 24 and 25)).

(Claim 35 discloses) the method as recited in claim 33, wherein the Web Service is a Business-to-Business Web Service, wherein the service provider is a business service provider, and wherein the service requester is a server (Carey et al shows the service provider is a business and the requester is a server (paragraphs 24, 25, and 31)).

(Claim 50 discloses) the method as recited in claim 31, further comprising providing integration and interoperability with the Web Service architecture for existing business functionality including one or more mainframe systems (Carey et al shows mainframes may integrate since a mainframe may be a provider and a requester (paragraph 25)).

Art Unit: 2441

(Claim 53 discloses) a computer-accessible medium comprising program instructions, wherein the program instructions are configured to implement: identifying one or more logical components of the Web Service architecture according to one or more use case requirements for a Web Service (Carey et al shows a request which identifies the web services based on a business requirement is received (paragraph 31).); translating the one or more use case requirements and one or more technical constraints to determine a plurality of heterogeneous Web Service components (Carey et al shows each requirement has an associated technical restraint which used in the process to identify a component to use (paragraphs 29, and 32-34).); categorizing the Web Service components according to a Web Service architecture framework (Carey et al shows the components are categorized by the provided framework (figure 3 and paragraph 34).); organizing the Web Service components according to two or more tiers and two or more layers of the Web Service architecture (Carey et al shows functions or components are organized by level of need and how to provide if not available (figures 4 and 5 and paragraph 36).); modifying one or more software components according to one or more architecture principles for each of the one or more tiers and the one or more layers (Carey et al shows the components are modified if a required service is not available (paragraphs 37-40).); and applying one or more Web Services design patterns to the Web Service architecture where appropriate (Carey et al shows once functions are complete they are adapted to the application (paragraphs 37-40)).

(Claim 54 discloses) the computer-accessible medium as recited in claim 53, wherein the Web Service architecture is configured for use in implementing a Web Service (Carey et al shows the system is used to provide web services (paragraph 23)).

(Claim 55 discloses) the computer-accessible medium as recited in claim 54, wherein the Web Service comprises: a service provider configured to provide one or more services of the Web Service on a network; and a service requester configured to access the one or more services of the Web Service on the service provider via the network (Carey et al shows the system has one or more providers providing web services and one or more requesters requesting services (paragraph 24)).

(Claim 56 discloses) the computer-accessible medium as recited in claim 55, wherein the Web Service is a Business-to-Consumer Web Service, wherein the service provider is a business service provider, and wherein the service requester is an end user (Carey et al shows the service provider is a business provider and the requester is a client computer (paragraphs 24 and 25)).

(Claim 57 discloses) the computer-accessible medium as recited in claim 55, wherein the Web Service is a Business-to-Business Web Service, wherein the service provider is a business service provider, and wherein the service requester is a server (Carey et al shows the service provider is a business and the requester is a server (paragraphs 24, 25, and 31)).

(Claim 72 discloses) the computer-accessible medium as recited in claim 53, wherein the program instructions are further configured to implement providing integration and interoperability with the Web Service architecture for existing business

Art Unit: 2441

functionality including one or more mainframe systems (Carey et al shows mainframes may integrate since a mainframe may be a provider and a requester (paragraph 25)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 36, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al (US PG PUB US2004/0225660) in view of Eibach et al (US PG PUB US2003/0084350).

Claim 8 discloses the system as recited in claim 1, wherein, to categorize the Web Service components according to a Web Service architecture framework, the program instructions are further executable by the processor to categorize the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach categorizing the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Eibach et al teaches categorizing the components of web services into a service category among others (paragraph 22).

Carey et al and Eibach et al are analogous art because they are both related to managing web services.

Art Unit: 2441

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the categorization feature in Eibach et al with the system in Carey et al because web services are able to be properly identified under a category and service description, (Eibach, paragraph 22).

Claim 36 discloses the method as recited in claim 31, wherein said categorizing the Web Service components according to a Web Service architecture framework comprises categorizing the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach categorizing the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Eibach et al teaches categorizing the components of web services into a service category among others (paragraph 22).

Carey et al and Eibach et al are analogous art because they are both related to managing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the categorization feature in Eibach et al with the system in Carey et al because web services are able to be properly identified under a category and service description, (Eibach, paragraph 22).

Claim 58 discloses the computer-accessible medium as recited in claim 53, wherein, in said categorizing the Web Service components according to a Web Service architecture framework, the program instructions are further configured to implement

Art Unit: 2441

categorizing the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach categorizing the Web Service components into one or more of service delivery, service management, identity/policy and services Web Service components. Eibach et al teaches categorizing the components of web services into a service category among others (paragraph 22).

Carey et al and Eibach et al are analogous art because they are both related to managing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the categorization feature in Eibach et al with the system in Carey et al because web services are able to be properly identified under a category and service description, (Eibach, paragraph 22).

Claims 9, 37, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al (US PG PUB US2004/0225660) in view of Park (US PG PUB US2002/0001295).

Claim 9 discloses the system as recited in claim 1, wherein the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport

Art Unit: 2441

layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer; and an Open Standards layer. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer;

Art Unit: 2441

and an Open Standards layer. Park teaches web services are categorized using at least a security and a transport layer (paragraph 50).

Carey et al and Park are analogous art because they are both related to web service providing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the layers in Park with the system in Carey et al because a service is provided by a provider intermediating between a client and another service provider (Park, paragraph 2).

Claim 37 discloses the method as recited in claim 31, wherein the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer; and an Open Standards layer. Carey et al teaches the limitations of claim 31 as recited

Art Unit: 2441

above. It fails to teach the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer; and an Open Standards layer. Park teaches web services are categorized using at least a security and a transport layer (paragraph 50).

Carey et al and Park are analogous art because they are both related to web service providing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the layers in Park with the system in Carey et al because a service is provided by a provider intermediating between a client and another service provider (Park, paragraph 2).

Art Unit: 2441

Claim 59 discloses the computer-accessible medium as recited in claim 53, wherein the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer; and an Open Standards layer. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach the layers comprise two or more of: a network layer configured to serve as an underlying network for Web Services implemented according to the Web Service architecture; a transport layer for delivering messages between components of the Web Services; a service description language layer configured to describe service type and functionality of the Web Services; a transaction routing layer configured to route messages on the transport layer; a service discovery layer configured to search for and locate the Web Services; a service negotiation layer configured to negotiate exchanges between service requesters

Art Unit: 2441

and service providers implemented according to the Web Service architecture; a management layer configured for provisioning of the Web Services and for monitoring and administration of the Web Services; a Quality of Service layer configured to provide reliability, scalability, and availability for the Web Services; a security layer configured to provide authentication, entitlement, and non-repudiation security on the transport layer; and an Open Standards layer. Park teaches web services are categorized using at least a security and a transport layer (paragraph 50).

Carey et al and Park are analogous art because they are both related to web service providing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the layers in Park with the system in Carey et al because a service is provided by a provider intermediating between a client and another service provider (Park, paragraph 2).

Claims 10-14, 24, 25, 29, 38-41, 51, 52, 60-63, and 73, 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al (US PG PUB US2004/0225660) in view of Curry et al (US PG PUB US2003/0233631).

Claim 10 discloses the system as recited in claim 1, wherein the design patterns comprise one or more of: one or more Quality of Services design patterns; and one or more Security design patterns. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach the design patterns comprise one or more of: one or more Quality of Services design patterns; and one or more Security design patterns.

Art Unit: 2441

Curry et al teaches any business logic template which is widely known to include quality of services or security is used (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 11 discloses the system as recited in claim 1, wherein the memory further comprises a Web Services Design Pattern catalog, wherein the program instructions are further executable by the processor to access the one or more Web Services design patterns from the Web Services Design Pattern catalog for said application to the Web Service architecture. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach accessing the one or more Web Services design patterns from the Web Services Design Pattern catalog for said application to the Web Service architecture. Curry et al teaches templates are available and used to create a web service (paragraph 55).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because

Art Unit: 2441

quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 12 discloses the system as recited in claim 11, wherein the Web Services Design Pattern catalog is configured for use in generating one or more additional Web Service architectures. Curry et al further teaches a library of saved templates may be used to generate a web service (paragraph 54).

Claim 13 discloses the system as recited in claim 11, wherein the program instructions are further executable by the processor to: determine one or more new Web Services design patterns for application to the Web Service architecture; and record the one or more new Web Services design patterns in the Web Services Design Pattern catalog. Curry et al further teaches looking for a template to be used (paragraph 52), and once the modified template is tested the design is also able to be used over (paragraph 71).

Claim 14 discloses the system as recited in claim 11, wherein the program instructions are further executable by the processor to: determine that one of the one or more Web Services design patterns in the Web Services Design Pattern catalog need to be modified for the Web Service architecture; and modify the Web Services design pattern in the Web Services Design Pattern catalog. Curry et al further teaches determining if a template exists and if need it is modified (paragraphs 53 and 54), and a template is modified (paragraph 54).

Claim 24 discloses the system as recited in claim 23, wherein the one or more Web Services design patterns include one or more Mainframe Integration and

Art Unit: 2441

Interoperability design patterns. Carey et al teaches the limitations of claim 23 as recited above. It fails to teach the one or more Web Services design patterns include one or more Mainframe Integration and Interoperability design patterns. Curry et al teaches any business logic template which is widely known to include mainframe integration (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 25 discloses the system as recited in claim 24 wherein the Mainframe integration and Interoperability design patterns comprise one or more of a Synchronous Mainframe Web Services design pattern and an Asynchronous Mainframe Web Services design pattern. Curry et al further teaches templates are available and used to create a web service (paragraph 55).

Claim 29 discloses the system as recited in claim 26, wherein said Web Services structured methodology comprises means for storing and accessing the design patterns. Carey et al teaches the limitations of claim 26 as recited above. It fails to teach storing and accessing the design patterns. Curry et al teaches templates are stored for use (paragraph 51).

Art Unit: 2441

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 38 discloses the method as recited in claim 31, wherein the design patterns comprise one or more of one or more Quality of Services design patterns; and one or more Security design patterns. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach the design patterns comprise one or more of: one or more Quality of Services design patterns; and one or more Security design patterns. Curry et al teaches any business logic template which is widely known to include quality of services or security is used (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 39 discloses the method as recited in claim 31, wherein said applying one or more Web Services design patterns to the Web Service architecture comprises accessing the one or more Web Services design patterns from a Web Services Design

Art Unit: 2441

Pattern catalog. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach accessing the one or more Web Services design patterns from the Web Services Design Pattern catalog for said application to the Web Service architecture. Curry et al teaches templates are available and used to create a web service (paragraph 55).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 40 discloses the method as recited in claim 39, wherein the Web Services Design Pattern catalog is configured for use in generating one or more additional Web Service architectures. Curry et al further teaches a library of saved templates may be used to generate a web service (paragraph 54).

Claim 41 discloses the method as recited in claim 31, wherein the one or more Web Services design patterns are accessed from a Web Services Design Pattern catalog, the method further comprising: determining one or more new Web Services design patterns for application to the Web Service architecture; and recording the one or more new Web Services design patterns in the Web Services Design Pattern catalog. Curry et al further teaches looking for a template to be used (paragraph 52), and once the modified template is tested the design is also able to be used over (paragraph 71).

Claim 51 discloses the method as recited in claim 50, wherein the one or more Web Services design patterns include one or more Mainframe Integration and Interoperability design patterns. Carey et al teaches the limitations of claim 50 as recited above. It fails to teach the one or more Web Services design patterns include one or more Mainframe Integration and Interoperability design patterns. Curry et al teaches any business logic template which is widely known to include mainframe integration (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 52 discloses the method as recited in claim 51, wherein the Mainframe Integration and Interoperability design patterns comprise one or more of a Synchronous Mainframe Web Services design pattern and an Asynchronous Mainframe Web Services design pattern. Curry et al further teaches templates are available and used to create a web service (paragraph 55).

Claim 60 discloses the computer-accessible medium as recited in claim 53, wherein the design patterns comprise one or more of: one or more Quality of Services design patterns; and one or more Security design patterns. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach the design patterns comprise

Art Unit: 2441

one or more of: one or more Quality of Services design patterns; and one or more Security design patterns. Curry et al teaches any business logic template which is widely known to include quality of services or security is used (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 61 discloses the computer-accessible medium as recited in claim 53, wherein, in said applying one or more Web Services design patterns to the Web Service architecture, the program instructions are further configured to implement accessing the one or more Web Services design patterns from a Web Services Design Pattern catalog. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach accessing the one or more Web Services design patterns from the Web Services Design Pattern catalog for said application to the Web Service architecture. Curry et al teaches templates are available and used to create a web service (paragraph 55).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because

Art Unit: 2441

quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 62 discloses the computer-accessible medium as recited in claim 61, wherein the Web Services Design Pattern catalog is configured for use in generating one or more additional Web Service architectures. Curry et al further teaches a library of saved templates may be used to generate a web service (paragraph 54).

Claim 63 discloses the computer-accessible medium as recited in claim 61, wherein the program instructions are further configured to implement: determining one or more new Web Services design patterns for application to the Web Service architecture; and recording the one or more new Web Services design patterns in the Web Services Design Pattern catalog. Curry et al further teaches looking for a template to be used (paragraph 52), and once the modified template is tested the design is also able to be used over (paragraph 71).

Claim 73 discloses the computer-accessible medium as recited in claim 72, wherein the one or more Web Services design patterns include one or more Mainframe Integration and Interoperability design patterns. Carey et al teaches the limitations of claim 72 as recited above. It fails to teach the one or more Web Services design patterns include one or more Mainframe Integration and Interoperability design patterns. Curry et al teaches any business logic template which is widely known to include mainframe integration (paragraph 51).

Carey et al and Curry et al are analogous art because they are both related to web services developing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the templates in Curry et al with the system in Carey et al because quality proven web services having minimal debugging requirements is provided (Curry, paragraph 27).

Claim 74 discloses the computer-accessible medium as recited in claim 73, wherein the Mainframe Integration and Interoperability design patterns comprise one or more of a Synchronous Mainframe Web Services design pattern and an Asynchronous Mainframe Web Services design pattern. Curry et al further teaches templates are available and used to create a web service (paragraph 55).

Claims 15-22, 30, 42-49, and 64-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al (US PG PUB US2004/0225660) in view of Upton (US PG PUB US2003/0105884).

Claim 15 discloses the system as recited in claim 1, wherein the Web Service architecture is configured for use in implementing an Enterprise integrated Web Service. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach the Web Service architecture is configured for use in implementing an Enterprise integrated Web Service. Upton teaches web services are used in an enterprise web service (paragraphs 25 and 26).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the enterprise system in Upton with the system in Carey et al

Art Unit: 2441

because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 16 discloses the system as recited in claim 1, wherein the Web Service architecture is configured for use in implementing a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach the Web Service architecture is configured for use in implementing a Cross-Enterprise integrated Web Service. Upton teaches a system in implemented for cross enterprise integration (paragraph 16).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cross enterprise system in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 17 discloses the system as recited in claim 1, wherein the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 1 as recited above. It fails to teach the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Upton

Art Unit: 2441

teaches using an integration framework for enterprise or cross-enterprise integration (paragraph 41).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the integration framework in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 18 discloses the system as recited in claim 17, wherein the program instructions are further executable by the processor to: define a plurality of integration tiers, one or more basic components, and one or more Web Services technologies for enterprise or cross-enterprise integration according to the enterprise and cross-enterprise integration framework; and define how each of the plurality of integration tiers communicates with others of the plurality of integration tiers according to the enterprise and cross-enterprise integration framework. Upton further teaches the use of adapters and applications views to define services and events used in the integration (paragraphs 30 and 31), and adapters define how the applications are to interact (paragraphs 30 and 31).

Claim 19 discloses the system as recited in claim 18, wherein the program instructions are further executable by the processor to define integration of one or more EAI products with the one or more Web Services technologies according to the

Art Unit: 2441

enterprise and cross-enterprise integration framework. Upton further teaches defining the integrations with services (paragraph 39).

Claim 20 discloses the system as recited in claim 18, wherein the plurality of integration tiers comprises one or more of: a client tier, a presentation tier, a business tier, an integration tier, and a resources tier. Upton further teaches a business view or tier is used (paragraph 36).

Claim 21 discloses the system as recited in claim 17, wherein the enterprise and cross-enterprise integration framework comprises one or more integration design patterns configured for use in generating the Web Service architecture. Upton further teaches templates are used for the integration design (paragraphs 93 and 94).

Claim 22 discloses the system as recited in claim 21, wherein the integration design patterns comprise one or more of: an Application-to-Application Design Pattern; a Standard Build Design Pattern; a Hub-Spoke Replication Design Pattern; a Federated Replication Design Pattern; a Multi-Step Application Integration Design Pattern; a Data Exchange Design Pattern; a Closed Process Integration Design Pattern; an Open Process Integration Design Pattern; a Service Consolidation-Broker Integration design pattern; and a Reverse Auction-Broker Integration design pattern. Upton further teaches an application to application and a standard design pattern is available (paragraph 93).

Claim 30 discloses the system as recited in claim 26, wherein the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in

Art Unit: 2441

implementing an Enterprise or a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 26 as recited above. It fails to teach the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Upton teaches using an integration framework for enterprise or cross-enterprise integration (paragraph 41).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the integration framework in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 42 discloses the method as recited in claim 31, further comprising implementing an Enterprise integrated Web Service according to the Web Service architecture. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach the Web Service architecture is configured for use in implementing an Enterprise integrated Web Service. Upton teaches web services are used in an enterprise web service (paragraphs 25 and 26).

Carey et al and Upton are analogous art because they are both related to implementing web services.

Art Unit: 2441

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the enterprise system in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 43 discloses the method as recited in claim 31, further comprising implementing a Cross- Enterprise integrated Web Service according to the Web Service architecture. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach the Web Service architecture is configured for use in implementing a Cross-Enterprise integrated Web Service. Upton teaches a system in implemented for cross enterprise integration (paragraph 16).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cross enterprise system in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 44 discloses the method as recited in claim 31, wherein the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 31 as recited above. It fails to teach the Web Service architecture framework comprises an enterprise and cross-enterprise integration

Art Unit: 2441

framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Upton teaches using an integration framework for enterprise or cross-enterprise integration (paragraph 41).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the integration framework in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 45 discloses the method as recited in claim 44, further comprising: defining a plurality of integration tiers, one or more basic components, and one or more Web Services technologies for enterprise or cross-enterprise integration according to the enterprise and cross-enterprise integration framework; and defining how each of the plurality of integration tiers communicates with others of the plurality of integration tiers according to the enterprise and cross-enterprise integration framework. Upton further teaches the use of adapters and applications views to define services and events used in the integration (paragraphs 30 and 31), and adapters define how the applications are to interact (paragraphs 30 and 31).

Claim 46 discloses the method as recited in claim 45, further comprising defining integration of one or more EAI products with the one or more Web Services

Art Unit: 2441

technologies according to the enterprise and cross-enterprise integration framework.

Upton further teaches defining the integrations with services (paragraph 39).

Claim 47 discloses the method as recited in claim 45, wherein the plurality of integration tiers comprises one or more of: a client tier, a presentation tier, a business tier, an integration tier, and a resources tier. Upton further teaches a business view or tier is used (paragraph 36).

Claim 48 discloses the method as recited in claim 45, wherein the enterprise and cross-enterprise integration framework comprises one or more integration design patterns configured for use in generating the Web Service architecture. Upton further teaches templates are used for the integration design (paragraphs 93 and 94).

Claim 49 discloses the method as recited in claim 48, wherein the integration design patterns comprise one or more of: an Application-to-Application Design Pattern; a Standard Build Design Pattern; a Hub-Spoke Replication Design Pattern; a Federated Replication Design Pattern; a Multi-Step Application Integration Design Pattern; a Data Exchange Design Pattern; a Closed Process Integration Design Pattern; an Open Process Integration Design Pattern; a Service Consolidation-Broker Integration design pattern; and a Reverse Auction-Broker Integration design pattern. Upton further teaches an application to application and a standard design pattern is available (paragraph 93).

Claim 64 discloses the computer-accessible medium as recited in claim 53, wherein the Web Service architecture is configured for use in implementing an Enterprise integrated Web Service according to the Web Service architecture. Carey et

Art Unit: 2441

al teaches the limitations of claim 53 as recited above. It fails to teach the Web Service architecture is configured for use in implementing an Enterprise integrated Web Service. Upton teaches web services are used in an enterprise web service (paragraphs 25 and 26).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the enterprise system in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 65 discloses the computer-accessible medium as recited in claim 53, wherein the Web Service architecture is configured for use in implementing a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach the Web Service architecture is configured for use in implementing a Cross-Enterprise integrated Web Service. Upton teaches a system in implemented for cross enterprise integration (paragraph 16).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cross enterprise system in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 66 discloses the computer-accessible medium as recited in claim 53, wherein the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Carey et al teaches the limitations of claim 53 as recited above. It fails to teach the Web Service architecture framework comprises an enterprise and cross-enterprise integration framework, and wherein the Web Service architecture is configured for use in implementing an Enterprise or a Cross-Enterprise integrated Web Service. Upton teaches using an integration framework for enterprise or cross-enterprise integration (paragraph 41).

Carey et al and Upton are analogous art because they are both related to implementing web services.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the integration framework in Upton with the system in Carey et al because universal connectivity and capability of massive scalability is provided (paragraph 16).

Claim 67 discloses the computer-accessible medium as recited in claim 66, wherein the program instructions are further configured to implement: defining a plurality of integration tiers, one or more basic components, and one or more Web Services technologies for enterprise or cross-enterprise integration according to the enterprise and cross-enterprise integration framework; and defining how each of the plurality of integration tiers communicates with others of the plurality of integration tiers according

Art Unit: 2441

to the enterprise and cross-enterprise integration framework. Upton further teaches the use of adapters and applications views to define services and events used in the integration (paragraphs 30 and 31), and adapters define how the applications are to interact (paragraphs 30 and 31).

Claim 68 discloses the computer-accessible medium as recited in claim 67, wherein the program instructions are further configured to implement defining integration of one or more EAI products with the one or more Web Services technologies according to the enterprise and cross-enterprise integration framework. Upton further teaches defining the integrations with services (paragraph 39).

Claim 69 discloses the computer-accessible medium as recited in claim 67, wherein the plurality of integration tiers comprises one or more of: a client tier, a presentation tier, a business tier, an integration tier, and a resources tier. Upton further teaches a business view or tier is used (paragraph 36).

Claim 70 discloses the computer-accessible medium as recited in claim 67, wherein the enterprise and cross-enterprise integration framework comprises one or more integration design patterns configured for use in generating the Web Service architecture. Upton further teaches templates are used for the integration design (paragraphs 93 and 94).

Claim 71 discloses the computer-accessible medium as recited in claim 70, wherein the integration design patterns comprise one or more of: an Application-to-Application Design Pattern; a Standard Build Design Pattern; a Hub-Spoke Replication Design Pattern; a Federated Replication Design Pattern; a Multi-Step Application

Art Unit: 2441

Integration Design Pattern; a Data Exchange Design Pattern; a Closed Process Integration Design Pattern; an Open Process Integration Design Pattern; a Service Consolidation-Broker Integration design pattern; and a Reverse Auction-Broker Integration design pattern. Upton further teaches an application to application and a standard design pattern is available (paragraph 93).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sedukhin (US PGPUB US2004/0030627) teaches of a web services broker.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gillis whose telephone number is (571)272-7952. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2441

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian J Gillis
Examiner
Art Unit 2441

/B. J. G./
Examiner, Art Unit 2441
3/25/2009

/Larry D Donaghue/
Primary Examiner, Art Unit 2454